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# AMERICAN NURSERYMAN

The National Journal Of Commercial Horticulture

 Circulating Throughout the United States, Canada and Abroad, Featuring Commercial Horticulture in all its Phases of Nursery Stock, Orchard, Landscape Planting, Distribution. Published Semi-Monthly by American Fruits Publishing Company, Inc. 

Vol. XXVIII

ROCHESTER, N. Y., OCTOBER 1, 1918

No. 7

## PAINESVILLE NURSERIES

BIDDING FOR FALL BUSINESS

### Fruit Trees

Apples  
Pears  
Plums Etc.

### Small Fruits

Currants  
Gooseberries  
Blackberries Etc.

### Shrubs and Vines

Buddleia  
Calycanthus  
Cydonia  
Hydrangeas  
Privet  
Spireas  
Weigela  
Ampelopsis  
Climbing Hskls. Etc.

### Ornamental

Ash  
Cut-leaf Wpg. Birch  
Catalpas  
Cornus  
Elms  
Horsechestnut  
Judas  
Linden  
Maples  
Mulberries  
Teas Wpg. and Globosa  
Poplars  
Salisburya  
Sycamore  
Willows Etc.

### Roses

Hardy Perennials  
Peonies, Phlox, Iris and  
Complete  
General Assortment.

We will have no Dutch Bulbs this fall; otherwise, "Business as Usual". Glad to handle your Want Lists

## The Storrs & Harrison Co.

Established  
1854

NURSEYMEN - - - FLORISTS - - - SEEDMEN  
PAINESVILLE, OHIO

45 Greenhouses  
1200 Acres

The  
Preferred  
Stock

The  
Preferred  
Stock

## FABLE

A leopard once met a lion down by a water hole in the jungle and said, "Why do you go about the jungle roaring the way you do?"

The lion said, "I believe in advertising. If it had not been for my advertising I would never have been made the king of beasts. It pays to advertise, and I never fail to grasp an opportunity to do it."

It so happened that a rabbit, who was crouching down in some weeds, heard this conversation, and appreciated the logic of the thing. Next day, as he was nibbling at a big tree, he filled his lungs, threw back his head, and let out what he expected to be a roar; it resulted in a high-pitched squeak. A fox happened to be on the other side of the tree, and hearing the squeak went around to investigate. As a result he ate the rabbit.

Now the morale of this parable is, it is folly to advertise if you don't have the goods. We have the goods and we are not afraid to advertise. We not only have the goods, but can give you prompt service.

**OUR FALL TRADE-LIST HAS BEEN MAILED OUT. Did you get your copy? If not, it will be worth your while to write for it and get on our mailing list.**

Please use printed stationery when writing, though, or enclose business card. We send it only to the trade.

## JACKSON & PERKINS CO., NEWARK, NEW YORK

We are subscribers to the Nurserymen's  
Market Development Fund

The  
Preferred  
Stock

The  
Preferred  
Stock

### We Solicit Correspondence and a List of Your Wants for Fall 1918-Spring 1919

CALIFORNIA PRIVET, 2 yr. Extra good

All grades—Special prices on carload lots. Samples if desired.  
Oriental Planes and Norway Maples. Pin and Willow Oaks  
and Lombardy Poplars. A select lot of trees in all sizes—  
transplanted.

APPLES, 3 yr. with 2 yr. heads

These are good trees, but not as smooth as trees with 1 year  
heads.

We offer them at a low price. Samples if interested.  
1 year Apple Buds

All the Standard Varieties in 2-3 ft. and 3-4 ft. grades.

#### MISCELLANEOUS

A good stock of Flowering Shrubs, Shade Trees, etc., etc.

### FRANKLIN DAVIS NURSERIES, Inc.

BALTIMORE, MD.,  
404 W. Baltimore St.

JOSEPH DAVIS,  
General Manager.

### Bees' Welsh-Grown Roses

The necessity for reducing output of  
roses, etc., in order to increase National  
Food Production, renders it impracticable  
and unnecessary to advertise as largely as  
usual.

Regular buyers have had a printed offer  
sent to them. There are a few copies still  
available for applicants.

Please let us have your orders and ap-  
plications early, so that we may have  
ample time to give you prompt delivery.

Thank you.

BEES, Ltd.

175-181 Mill St., LIVERPOOL, ENG.

## "The Book of Princeton Products"

Send for a copy; it will interest you. It is "differ-  
ent," just as our business, our marketing methods and  
the quality and variety of our goods are different.

Our Annual Trade List attempts to illustrate these  
points with some thirty-odd photographs, taken in our  
nurseries this summer, supplemented by comments that  
are clear and frank.

The List is unusual in plan and purpose and hand-  
somely printed. It will appeal to wide-awake Nursery-  
men who appreciate Quality and Value in trees and  
plants.

*May we send you one, if you haven't one already? It is  
free, and asking for one implies no obligation whatever to  
buy.*

## PRINCETON NURSERIES

PRINCETON, NEW JERSEY

Wholesale Growers for The Trade Exclusively

October First

We are subscribers to the Nurserymen's  
Market Development Fund

## AMERICAN NURSERYMAN---October 1, 1918

**EDITORIAL DEPARTMENT**—Communications on any subject connected with Commercial Horticulture, Nurseries or Arboriculture are cordially invited by the Editor; also articles on these subjects and papers prepared for conventions of Nursery or Horticultural associations. We also shall be pleased to reproduce photographs relating to these topics, Orchard Scenes, Cold Storage Houses, Office Buildings, Fields of Stock, Specimen Trees and Plants, Portraits of Individuals, etc. All photographs will be returned promptly.

**ADVERTISING**—Advertising forms close on the 12th and 27th of each month. If proofs are wanted, copy should be on hand one week earlier. Advertising rate is \$1.40 per column-width inch.

"AMERICAN NURSERYMAN" is distinctive in that it reaches an exceptional list and covers the field of the business man engaged in Commercial Horticulture—the earliot operator. Here is concentrated class circulation of high character—the Trade Journal of Commercial Horticulture, quality rather than quantity.

"AMERICAN NURSERYMAN" will not accept advertisements that do not represent reliable concerns.

**SUBSCRIPTIONS**—"AMERICAN NURSERYMAN" will be sent to any address in the United States for \$1.50 a year; to Canada or abroad for \$2.00 a year. Add ten cents unless bank draft, postal or express money order is used. Three years, \$3.50 in U. S.

RALPH T. OLCOTT  
Editor and Manager

AMERICAN FRUITS PUBLISHING COMPANY, INC. 39 State Street, Rochester, N. Y.

**WHAT THIS MAGAZINE STANDS FOR**—Clean chronicling of commercial news of the Planting Field and Nursery. An honest, fearless policy in harmony with the growing ethics of modern business methods.

Co-operation rather than competition and the encouragement of all that makes for the welfare of the trade and of each of its units.

Wholesome, clean-cut, ring true independence.

**INDEPENDENT AND FEARLESS**—"AMERICAN NURSERYMAN" is not the official journal of any organization. It therefore makes no distinction in favor of any. It is untrammelled in its absolutely independent position and is the only Nursery Trade publication which is not owned by nurserymen.

This Magazine has no connection whatever with a particular enterprise. Absolutely unbiased and independent in all its dealings.

Though it happens that its place of publication is in the eastern section of the country, it is thoroughly National in its character and International in its circulation.

Its news and advertising columns bristle with announcements from every news corner of the Continent.

It represents the results of American industry in one of the greatest callings—Commercial Horticulture in all its phases of Nursery Stock, Orchard and Landscape Planting and Distribution.

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## WANTED

NURSERYMEN TO DRAW ON  
US FOR THE FOLLOWING

Peach, Apricot, Apple, Pear,  
Plum, Cherry, Pecans, Roses

and Other Ornamentals

**HEIKES - HUNTSVILLE - TREES**

All our own growing. In good assortment. Prices right.

**HUNTSVILLE WHOLESALE NURSERIES**

HUNTSVILLE, ALA.

## Vincennes Nurseries

W. C. REED, Prop. VINCENNES, IND.

We are pleased to offer for Fall or Spring  
CHERRY 2 YEAR X X 1 inch up, also 3-4, 5-8 and lighter grades

CHERRY, One Year 11-16 up, 5-8 and 1-2 to 5-8

Our Blocks of Cherry are largest to be found in U. S.

We bud annually 500,000 Cherry, they are making splendid growth

Peach, One Year, all grades, leading Varieties

Plum, Japan and European, 1 and 2 year

APPLE, 2 Year, a few cars for late fall shipment

Grafted Hardy Northern Pecans

Car Lots a specialty. Also fair assortment of Ornamentals



# American Nurseryman

## The National Journal Of Commercial Horticulture

Entered September 1, 1916, at Rochester, N. Y. Post Office as second-class mail matter

Vol XXVIII

ROCHESTER N. Y., OCTOBER 1, 1918

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### A PATRIOTIC AND INSPIRING WORK FOR SOLDIERS

The American Nurseryman has repeatedly referred to the practical, important work of the National Plant, Flower and Fruit Guild, 70 Fifth Avenue, New York City, in supplying needs of soldiers enroute and in camp and in beautifying cantonments. An effective poster depicts the barren condition of the camps contrasted with the transformation of landscape there due to the work of this Guild.

Prominent women of the country are back of this movement. Flowers, fruits and jelly are distributed to 2500 institutions by this Guild. The national president, Mrs. John Wood Stewart, has issued the following.

#### AN APPEAL FOR SOLDIERS' CAMP GARDENS

To make gardens for the camps where our boys are training for the trenches is the need of the hour. A camp is a dreary substitute for the homes they have left. Most of the camps are absolutely barren, without trace of tree, plant or flower life.

This Guild which has established gardens of all sorts for the poor of our cities for more than 25 years has been asked to solicit plants and shrubs from those who have them and for money to push this movement till every camp shall be a place to delight the eye.

The modest demand from Camp Upton is "300,000 geraniums, and whatever else the Guild can furnish." The help offered by the Guild has stimulated the officers and men till they say they will make that arid desert "blossom as the rose," if we will stand by them.

Come, friends, let us join forces and if each one who reads this will lend a hand, we feel confident we can do this for every camp in our broad country. Let us make our boys gay and strong by this expression of our sympathy and so help them to meet the enemy with courage born of cheer.

Let everybody help with dimes or dollars.

Sincerely yours,

LAURA S. STEWART,  
National President.

Major General J. F. Bell, commanding Camp Upton, N. Y., has given this hearty indorsement:

"I am very glad to indorse the movement started by the National Plant, Flower and Fruit Guild to furnish plants to the various army cantonments. The idea is splendid and would have great effect towards beautifying camps, making the life in them more cheerful.

"The plants sent by you to Camp Upton have been received and distributed, and as Cantonment Commander, I wish to thank you for what you have done and to offer you all encouragement for what you may do in the future."

Maurice Fuld, national chairman of soldiers' camp gardens, makes this acknowledgement:

#### WE ARE GRATEFUL

To the Horticultural Fraternity—the florists—the nurserymen—the seedsmen—who have given so cheerfully and generously during the past season, enabling us to make a fair representation of what can be done.

One nurseryman took the boys to a field of handsome evergreens and said, "Boys, this is yours. Help yourself."

A large seed firm gave a thousand Gladioli bulbs for every camp in the country.

A florist filled hundreds of window boxes and delivered them to the camp.

Others gave geraniums by the thousands, and many stinted themselves so they could show their generous and patriotic spirit.

Remember: Give them the courage born of cheer.

The following are connected with the movement:

**Officers.**—Mrs. John Wood Stewart, Founder and National President; Mrs. Alexander Van Rensselaer, National Vice-President; David Fairchild, National Vice-President; Mrs. William Sloane, National Vice-President; Mrs. Lewis B. Stilwell, National Vice-President; Miss Ellen Eddy Shaw, National Secretary, Miss V. D. H. Furman, National Treasurer.

National Honorary President—John Burroughs.

Honorary Vice-Presidents—Jane Addams, Edward Bok, George W. Cable, Stanley Hall, Frederick Law Olmsted, Charles Sprague Sargent, Gustave Straubenmuller, Josiah Strong, Kate Douglas Wiggin.

We bespeak continued cordial co-operation on the part of the nurserymen of the country.

#### A CREED FOR AMERICANS

I believe that the cause of the United States and the Allies is a just cause and makes for righteousness.

I believe the Kaiser and the Potsdam gang cannot make a treaty we have any right to approve.

I believe we do not discharge our duty to ourselves and the world till we have fought this war to a victory over the Kaiser and the Potsdam gang and the German Government as it is at present constituted.

I believe all our energies during the next three years should be devoted to raising an army of 5,000,000 men and the ships necessary to transport them to France, and the supplies necessary to them to fight this war.

I know we are going to win this war.

WILLIAM HOWARD TAFT,  
Former President of the United States

#### American and English Income Taxes

In comparison with the tax levied in England on incomes our own income taxes are moderate, indeed.

In England the tax on incomes of \$1,000 is 4½ per cent; in America nothing.

In England the tax on incomes of \$1,500 is 6¾ per cent; in America nothing for married men or heads of families, and 2 per cent on \$500 for unmarried man.

In England the tax on an income of \$2,000 is 7¾ per cent; in America nothing for a married man or head of a family, and 2 per cent on \$1,000 for unmarried men.

The English income tax rate also increases more rapidly with the growth of the income than ours, a \$3,000 income being taxed 14 per cent, \$5,000 16 per cent, \$10,000 20 per cent, while our corresponding taxes for married men are respectively two-thirds of 1 per cent, 1½ per cent, 3½ per cent and 5 per cent, and only slightly more for the unmarried, due to the smaller amount exempted, the rate being the same.

#### From Major Lloyd C. Stark

Headquarters 2nd Battalion, 315th Field Artillery, A. E. F. France,

August 21, 1918.

To the Members of the American Association of Nurserymen:

My dear friends:—I have just received a letter written by your committee, in which are said some very complimentary things regarding your retiring president and friend.

I cannot tell you how much I appreciate your thoughtfulness, your friendship and good will.

It was a great pleasure to send you my brief "Message," and although short, it was most sincere. I deeply regret that I could not be present with you at the Chicago meeting.

Since landing here last spring I have had some very unusual experiences. Recently I had a little fun flying with the British, was fired upon by "Big Bertha" and the train I was on was bombed by a Boche aeroplane. Luckily he was driven off before he registered a hit, so I am still here.

All our men have been doing marvelously well over here, even better than the papers report. Both the British and French are delighted with the way our men fight, and the nerve and ability of our officers.

The war may last a long time before the Germans are beaten, but there is absolutely no doubt about the ultimate outcome. America will go down in history not only as the "Cradle of Liberty" but the "Savior of Liberty." The first battle of Chateau Thierry will go hand in hand with the "Battle of Lexington" in our school books.

We are terribly busy here now and it is almost impossible to write letters. Also the censor will not let us write much. When I get back home, which I hope to do, I will have some very interesting tales to tell and if I don't get through just think of me sometimes when you are gathered around the big round tables.

In the meantime even though I cannot write many letters, I shall be glad indeed to hear from all my old friends in the Association, whenever you find time to write. When I say friends, I mean all of you, for if I have an enemy who is a member of the Association, I do not know it.

Again assuring the members of the Association of my appreciation for all you have done for me, and with kindest regards and best wishes, I am

Most sincerely,

Your friend,

Lloyd C. Stark.

Major 315th Field Artillery,  
American Expeditionary Forces.

#### Put the "pay" into patriotism.

The 1918 autumn list issued by the Elm City Nursery Co., New Haven, Conn., bears concrete evidence of the growing tendency to fix prices of nursery stock at a fair figure, commensurate with market conditions. It's better to sell, if necessary, and do business on a living margin, very properly says President Coe of the New Haven Company.

### Major Stark En Tour

Herewith are extracts from letters written by Major Lloyd C. Stark in France to his family in Missouri:

"July 17, 1918: We have now received all our instruments for the Orientation work—that is, the surveying work we have to do to find where the German batteries are on our fighting maps, where our own guns are, and the angles and elevations we must use to hit them—telescopes, aiming circles, binocular telescopes, scales, periscopes for observing from the front line trenches and many others—they are wonderful ones too—mostly made in Paris.

"Also, we have our complete telephone system, switchboards, telephones and all the material for putting up a complete system and we have already installed a system between our batteries my battalion, infantry and my headquarters (which I just moved into today). My new office is a dandy. I have two rooms, one for my adjutant, sergeant major and myself, the other for the orderlies and the operators of the telephone central. Tomorrow we will erect our wireless set and then I'll be able to get the wireless and news direct from the Eiffel Tower in Paris."

"Twice, I have motored up and down the line from a little north of Paris to the sea. My present work covers almost this entire area, and I am the commanding officer of the Region du Nord, of the particular special duty I'm on now. I wouldn't have missed this experience for anything, but I hope to be ordered back to the regiment by the middle of August. Have met many of the higher officers of the French including the French general commanding all the region north of Paris—Region du Nord. His chief of staff asked me for dinner last night and we had a very interesting party. My French is still very amateurish, but I managed to make myself understood. One of the colonels, an old chap who had been in the Franco-Prussian war in 1870, spoke some English.

"Col. ———, who is now a full colonel had this command until I relieved him, to go back and take command of the 313th, as their colonel has left for permanent duty at Pershing's Headquarters.

"The country through which I motor every day back and forth between my detachment is very beautiful, part in Pas de Calais, through Picardy and down into Normandy. All the poetry in the world cannot do it justice on these beautiful moonlight nights (I do much, in fact most of my traveling at night—sometimes 125 miles—200 kilometers).

"All the time we run quite near the line—not within artillery range however. Hope to make a trip into the front lines before very long. I feel much more optimistic than when I left America and think possibly next summer will see the finish.

"My health has been splendid. This present duty is rather wearing on account of little sleep but am feeling fine.

"You see my present job is one that keeps me 'en voyage' most of the time. Last night the German bombing planes came over here and dropped some of their enormous new high power bombs all around. Shook up all the buildings in the village and had everyone—the natives—running for the cellars. The Boche come around most every moonlight night and then our allied planes get after them and there are all kinds of fire works and noise. You can easily tell the Boche planes by the sound of their engine which sounds something like an auto engine when it is "loping"—that is, in regular spurts—about each sixth explosion seems to miss. The Allied planes give a uniform humming, (whirring) sound.

"This morning I went to call on General Harts, who is at British grand headquarters (Gen'l Haig's headquarters) as the head of the American Mission. Major Bacon, former U. S. ambassador to Paris, is there with Gen. Harts, also. We are right in the middle of things here, and not far in rear of the lines.

"The French people have certainly been wonderful to all of us so far and it is genuine."

**First Win the War.**—Across the sea, American boys face the enemy. They trust us to do our part. Our part is to work for war and not for self.



## Home Canning Army Going Over The Top

Signs Indicate Success of National Drive For 1,500,000,000 Quarts—Nurserymen's Aid Will Be Needed

The home canning army is going over the top. Every indication points to making the 1,500,000,000 quart goal set for this summer's objective.

Reports from the manufacturers of canning supplies who are conforming to recommendations of the United States Department of Agriculture, show a considerable increase in the output of equipment that saves time and labor in home canning. A 50 per cent increase is indicated this year in the number of firms that manufacture canning supplies and an average increase of 25 per cent in the quantity of equipment sold. Makers of standard quality rubber rings report a 300 per cent greater demand for their products since last year, which indicates the housekeepers' growing appreciation of the importance of good rings, and means an ultimate reduction in spoilage.

Over 125 business concerns of various kinds have published the Department of Agriculture's instructions on home canning for free distribution to their customers and employees. The directions have also been translated into 10 different languages by agencies outside the department, and are reaching the foreign-speaking families in nearly every state in the Union. Community canning kitchens are springing up rapidly to handle the large quantities of products from the war gardens.

A force of expert home canners numbering more than 3,000 home demonstration agents and leaders of boys' and girls' clubs backed up by many thousand volunteer workers are helping to "put across" the big canning drive. The United States Department of Agriculture and the State agricultural colleges are pushing the work to the limit, and both rural and city organizations and institutions are furthering the campaign in every way.

The demand for demonstrations of home canning has never been so great. Every state agricultural college has put out home canning demonstrators in addition to the permanent extension forces in the state.

The bulk of home canning has to do with fruit. The product of orchards and small fruit plantations all over the country has been called upon in unprecedented degree to supply this important food item. Exhaustion of old orchards and fields and demand of increasing population require new plantings. Will the nursery stock be available and will nurserymen be prepared generally to meet the demand which they should help wisely to stimulate?

### Good Food From Waste Apples

In these days when the world faces an increasingly serious food shortage it is unwise to overlook any resources that will add good, nourishing food to the nation's depleted supply. Therefore, says F. B. McMillin in Better Fruit, it is surely in order to again call special attention to the importance of properly utilizing that large porportion of the apple crop which grades below standard.

In many states the percentage of cull or cider apples runs fully one-third of the total and it is frequently estimated that thousands of tons of such apples are wasted each year. In view of the fact that millions of the world's population are facing starvation, no one will deny that this loss, along with other food waste, should be reduced to a minimum. Another important consideration is the good profits that the utilizing of these apples affords the grower.

While a portion of the larger culls may be evaporated to excellent advantage, the most practical way of diverting this enormous waste into good food is by pressing. Practically all the valuable and nutritive elements of fruits are contained in the juice. The other part consists largely of cellular tissue and are of little value except to retain the juice, which in ripe apples runs as high as ninety per cent. Therefore a short cut to conserving the rich, life-sustaining elements possessed by even the smallest of cull apples is by first grating and pressing, then working up the juice.

A modern hydraulic cider press will extract an average of a little over four gallons of cider from each bushel of ordinary under-grades. This juice can be readily converted into a variety of food products that are not only appetizing and nourishing, but most of them are in concentrated form convenient to market and easy to preserve. Sweet cider, cider vinegar, boiled cider, apple jelly, apple butter and pasteurized cider are all in active demand and can be sold at a better net profit than is usually obtained from the apples in a fresh condition.

Even the pomace need not be wasted. It is being used extensively as feed for dairy and beef cattle, and for hogs and sheep. Many pronounce it equal to ordinary corn silage. Pomace also has a distinct value as jelly stock because of its pectin content, which is not impaired by drying. Frequently the pomace is repressed, the resulting juice being used for making vinegar or jelly.

Fresh sweet cider and pasteurized cider are highly recommended as a health drink by eminent physicians and scientists. Sweet cider is a tonic as well as a nutrient, containing natural salts and acids of special value in the correcting of stomach complaints and liver and kidney trouble. Pure, sweet cider can readily be made available as a delightful home beverage the year around and is far superior to the ordinary type of soft drinks. Chemical preservatives should be avoided, but pasteurizing to 160 degrees for two hours and sealing tight is effective for preventing fermentation.

### KEEP THIS IN MIND

If you gave every dollar you own, how little would be the sacrifice compared to that of the man who endures life in the trenches and goes over the top!

But we are not asked to give. We are asked only to lend—to lend at good interest secured by the best collateral on earth:

**U. S. Liberty Bonds**



## Important Restrictions Proposed By Federal Board Transportation

Chairman Winfred Rolker of the New York Florists' Club which entered a protest against proposed restrictions by the Federal Horticultural Board has received the following:

"The experts of this department have given careful consideration to the restrictions which should be placed on the importation of nursery stocks, plants, and seeds into the United States as a result of the hearing of May 28, 1918. It is proposed to make these restrictions effective on and after June 1, 1919. The proposed quarantine will exclude all plants and plant products for propagation from all foreign countries, except as provided for in the regulations issued under the quarantine. For your information, and for any suggestions which you may care to make, I am sending you a copy of the tentative regulations governing the importations of such nursery stock, plants and seeds into the United States. In the provisional recommendations of the Bureau of Plant Industry, submitted as a tentative program of action in connection with the notice or hearing, it was provided that some four groups of plants, normally imported with earth about the roots, should be prohibited entry at future dates, in the case of three of these groups beginning July 1, 1919. The regulations as now drafted eliminate these groups altogether. Except as to the group (Azalea, etc.) for which a longer period was suggested, this is not a wide variation from the tentative program, inasmuch as the regulations now proposed do not go into effect until June 1, 1919. Furthermore, under existing war conditions and the action of the War Trade Board, importations of plants of all of these groups will be greatly limited if not stopped for the period of the duration of the war.

"Restriction 2 provides for the unrestricted entry of two groups of plants, namely (1) fruits, vegetables, cereals, and other plant products imported for food purposes; and (2) field, vegetable and flower seeds.

Regulation 3 provides, under compliance with the conditions of the subsequent regulations, for the importation of five groups of plants as follows:

- (1) Lily bulbs, Lily of the Valley, Narcissus, Hyacinths, Tulips, and Crocus, free from balls of soil or earth.
- (2) Fruit stocks, seedlings, cuttings, scions, and buds of fruits for reproduction purposes.
- (3) Rose stocks for reproduction purposes, including Manetti, Multiflora, Briar Rose, and Rosa Rugosa.
- (4) Nuts, including palm seeds, for oil or reproduction purposes.
- (5) Seeds of fruit, forest, ornamental and shade trees, seeds of deciduous and evergreen shrubs, and seeds of hardy perennial plants.

"These groups of plants and seeds under regulations 2 and 3 include the plants and seeds which were represented as essential to the floriculture and horticulture of this country, namely, the field, vegetable, and flower seeds, and fruit stocks, cuttings, scions, etc., rose stocks for reproduction purposes.

"The subsequent regulations, prescribing conditions of entry of the groups of plants enumerated in regulation 3, are based very largely on regulations hitherto enforced governing the entry of nursery stock. Provision has been made, however, in regulation 10 for the disinfection of plants offered for entry should, in the judgment of this

Board and the inspectors of the Department of Agriculture, such disinfection be necessary.

"The Board will be glad to have your association give careful consideration to these regulations and, if it seems desirable, a conference can be arranged for a discussion of these regulations. It is the wish of the Board to meet any reasonable objections which can be presented, and which will not involve a material increase of risk of entry of new plant pests.

"The quarantine will provide for the importation, through the agency of the U. S. Department of Agriculture, of plants and seeds for experimental or scientific purposes, and by this means it will be possible to import novelties or other plants and seeds for which special need can be shown. This does not mean, however, that the Department will undertake commercial importations for private firms.

Yours very truly, C. L. MARLATT,  
Chairman of the Board."

### DOLLARS THAT FIGHT

By Senator Henry Cabot Lodge

THE war will be won by men and ships, by guns and airplanes. To raise armies and supply them, to build the navy and support it, and to furnish ships and transports, we must have money in large amounts. The expenditures of the Government for the ensuing year are estimated at \$24,000,000,000, a sum which baffles the imagination to conceive. That vast amount must come one-third from taxes and two-thirds from loans. The success of the Fourth Loan, like those that preceded it, is, therefore, absolutely necessary. We must work with the highest speed, as if the war was to end in six months. We must prepare in every direction, as if it was to last for years. Speed and preparation are both expensive.

Without the Loans We Cannot Have Either.

Director-General McAdoo through Theodore H. Price, actuary to the United States Railroad Administration, has made formal and detailed answer to critics of results thus far of government control of the railroads. This is too long for reproduction here, but any of our readers may obtain a copy of the statement, we presume, by addressing the office of the director general of railroads, Washington, D. C. Marked improvement is noted in cases and explanation is made of conditions made necessary by war. There are indications for government control will result in much benefit eventually.

Freight cars are classed as rolling stock and in China are made to live up to their name. Chinese cars are in motion nearly all the time and furthermore they are heavily loaded. This is accomplished by assessing freight charges on the capacity of the car, not on the weight of the load put into it. The shipper, therefore, loads all he can into the car, reversing the practice common in America. The railroad's problem is to prevent overloading. In the case of bulky articles the roof of the car effectively prevents this, and where open cars covered with bamboo are used, the load limit is fixed by a loading gauge placed over the loading tracks under which the cars must pass.

The movement of Chinese cars is aided greatly by strict demurrage rules. "Free time" (time in which to unload) is twelve hours of daylight against forty-eight after 7 a. m. in the United States. On one line, the Shanghai-Nanking, free time is only six hours, but if the unloading of the car has not been commenced within four hours after the car has been set in place, it is shunted to a "godown" (warehouse), unloaded by station employees, and the cost tacked onto the freight. The company also reserves the right to add a storage charge of five cents per ton per day for goods in the godown. This treatment would give an American shipper apoplexy but it results in "freeing the cars."

Say you saw it in AMERICAN NURSERYMAN

### Care of Shrubs on Receipt from the Nursery--By H. S. DAY, Fremont, Ohio.

In the main, the care and treatment of shrubs on receipt from the nursery is practically the same as for trees. The leading difference which occurs to me, is in the treatment of the tops, as the tops of many varieties of shrubs will not stand what the tops of trees will.

The best thing to do with either trees or shrubs is to have your ground ready and plant them as soon as received. If the soil is not moist, it is best to pour in plenty of water in each hole as you plant. We usually dig the hole, place the shrub and fill in about half of the dirt, and then pour in about half a pail of water and go on to the next shrub and so on, coming back later and filling up the holes and packing the dirt down.

But if your ground is not ready for planting the next best thing to do is to remove the shrubs from the package, sprinkle the roots, and heel them in the ground. Always select a location for heeling where the soil is well drained so that the water never stands there, and which is loose and mellow, and preferably in some shade.

Always open the bundles of roots and spread them out, so that the moist earth will get sifted all through them. With shrubs it is best to open the tops of the bundles also. This precaution is not important with the shrubs which have a well matured and hardwood top, but it is important with all shrubs which have a soft wooded top, or tops of which were not well matured and ripened when dug, as this latter kind of tops are often injured, and some times entirely rotted out, when kept tied in tight bundles and given some moisture. This is particularly true of evergreens.

As the shrubs may have been in the box for some time before you received them and they sometimes remain longer than one ex-

pects after heeling them in, it is always safest to open both top and bottom of the bundles of shrubs when heeling them in. While shrubs may be kept safely in the package in which they arrive, it is always best to remove them, especially if they come in a box.

If not heeled in as above they may be packed up in the corner of a cellar or tight and cool building where no air currents may strike the roots, using the damp packing in which they came, with more wet straw if needed, to protect thoroughly the roots, and at the same time leave the tops exposed to the air.

Never, on receiving a box of shrubs and removing the cover, throw on a lot of water and let the shrubs remain in the box. They may either start to grow and heat, or the tops may be rotted off entirely.

Never, when you get to planting spread your shrubs all over the yard to see how they are going to look, and allow them to remain with roots exposed to the sun for any length of time. A half hour of such treatment may take most of the vitality out of the roots. A few minutes will not hurt them, but the time must be very short indeed. Better plant a small portion of the ground at a time. And also keep the remainder of the shrubs in the shade with roots protected.

In case any stock is received in a frozen condition, do not open it up and expose to the air at once, but place the entire package in a cool cellar or similar place, where the temperature is cool but not freezing and let it remain till the frost draws out. The slower the process the better. It is the sudden change of temperature that does the damage. If the stock is well packed it can be frozen solid and if thawed out slowly it will be uninjured, the process being the same as when the plant is growing in the ground.

# Southwestern Nurserymen In Annual Convention

**Tuesday, Sept. 24, 10 A. M.**

Call to order by president.

Address of welcome, Rev. J. E. Aubrey, Denison.

Response, J. A. Lopeman, Enid, Okla.

President's address, W. C. Griffing, Port Arthur, Texas.

Report of secretary-treasurer, L. J. Tackett, Fort Worth, Texas.

Is It Worth While to Build a Southwestern Nurserymen's Association? W. A. Wagner, Durant, Okla.

The Nursery Business During the War and After, J. R. Mayhew, Waxahachie, Tex.

**2 P. M.**

Appointment of committees.

The Nurserymen's Part in Winning the War, E. W. Kirkpatrick, McKinney, Texas. Stock, Supplies, Prices Wholesale, C. C. Mayhew, Sherman, Texas.

Discussion led by J. M. Ramsey, Austin, Texas.

The 1918 Drought and Its Effect Upon the Present Season's Business, John S. Kerr, Sherman, Texas.

Discussion led by John L. Foster, Denton, Texas.

Effect of the Government's Classification of Non-Essential Industries, J. B. Baker, Fort Worth, Texas.

The Labb Situation, W. B. Munson, Denison, Texas.

Discussion.

Landscaping in the Southwest, Edward Teas, Houston, Texas.

**Wednesday, Sept. 25, 10 A. M.**

The Question Box, thirty minutes.

The Nurseryman's Service to the World, Jim Parker, Tecumseh, Okla.

Observations of an Old-Timer, Forty-five Years on the Job, A. K. Clingman, Keithville, La. Supplemented by J. A. Bauer, Judsonia, Ark.

Present Prices of Nursery Stock Compared to Other Commodities, H. E. Hall, Sherman, Texas.

The outlook in Oklahoma, P. W. Vought, Holdenville, Okla.

Report of committees.

Election of officers.

Selection of place of meeting for 1919.

Adjournment.

Twenty-five delegates listened to the address by President W. C. Griffing, Port Arthur, Texas, at the opening of the annual convention of the recently organized Southwestern Association of Nurserymen in Denison, Tex., Sept. 24-25. The nurserymen present represented Texas, Louisiana, Arkansas and Oklahoma. Officers of the association which was formed in Denison last year, are: W. C. Griffing, Port Arthur, president; W. A. Wagner, Durant, Vice president; L. J. Tackett, Fort Worth, secretary-treasurer.

The program outlined above was followed as closely as was practicable.

The banquet developed into a very informal affair, taking on the aspect of a round table party where the visitors and hosts were free from any set program, and proving a very pleasant occasion. Numerous short talks were made by the visitors, during which there were many expressions of satisfaction at the cordial reception they had received, while talks were also made by R. S. Legate, W. S. King, Collin Calvert and Ben Munson, representing the Chamber of Commerce.

Just after the banqueters left the dining room they were assembled in the lobby of the hotel by L. J. Tackett, secretary-treasurer of the association, where a high tribute was paid to the late T. V. Munson, in the presence of Mrs. Munson and her two children, Will B. Munson and Mrs. Collin Calvert, the surviving members of the decedent's family, who attended the banquet.

Mr. Munson, during his lifetime, was signally honored by the French government for his scientific research which resulted in raising the blight from the almost destroyed

vineyards of that country. Mr. Tackett, in calling the assembly to order, stated that probably the surviving members of the family might never again be in attendance at a meeting of the association and thought it a fitting occasion for the members of the organization, who appreciated the husband and father so highly, to pause a moment in recognition of his services.

Members of the association in attendance at the banquet were: W. C. Griffing, Port Arthur; J. M. Ramsey, Austin; J. B. Baker, L. T. Tackett, Fort Worth; Sam B. Ross, Durant; A. S. Allen, Pottsboro; John L. Foster, Denton; E. M. Henderson, Athens; W. A. Wagner, Durant; J. L. Downing, Wichita Falls; C. F. Hoffman, Denton; John S. Kerr, Sherman; N. M. Shive, Cabot, Ark.; W. J. Brown, Dallas; J. T. Foote, Durant; J. R. Mayhew, Waxahachie; E. P. Bernardin, Parsons, Kan.; H. E. Hall, W. J. Carpenter, Sherman; N. D. Zuber, Houston; M. G. Black, Mount Pleasant; Will B. Munson, Denison.



W. C. GRIFFITH, Port Arthur, Tex.  
President Southwestern Association of Nurserymen

## A Big Avocado Nursery

Lloyd G. Tenny of Orlando, Fla., and W. J. Krome of Homestead, Fla., have secured an option on an extensive tract of land in what is known as the Perrine grant in Dade county, Florida, and will organize a corporation with a capital stock of \$50,000 for the development of the largest avocado nursery business in the United States with headquarters at Miami. Mr. Tenny, before taking up his work as organizer and secretary-manager of the Florida Growers' and Shippers' League, was professor of plant pathology in Cornell University of Ithaca, N. Y. He still holds his position on the advisory committee of the state plant board. Mr. Krome has been a successful citrus fruit and avocado grower for many years and is considered one of the best posted men on the growing of avocados in the country and has been conducting successful experiments with the United States plant industry station in Miami, Fla.

Propagation of varieties of avocados which will produce fruit every month in the year will be one of the objects of the new nursery corporation. Mr. Krome now has on his experiment station near Homestead all of the hardier California and Guatemalan varieties, and these will be used as a basis for

the nursery. However, it is the intention of Mr. Krome and Mr. Tenny to follow the principles laid down by Professor Shamel of California who produces nursery stock only from trees which have proven their fruit producing qualities. This principle is known as bud selection.

"I have traveled all over the United States and studied the fruit industry of every locality and I am right here to say that the avocado is the one best of the lower East Coast of Florida," said Mr. Tenny. "I am convinced that the avocado is the coming fruit. No fruit known to man aside from the olive has so great a percentage of food value. The work done in Florida during the last few years has proven that, especially in Dade county, the avocado can be grown profitably and can be satisfactorily transported to the big markets of the United States."

The Framingham Nurseries, Framingham, Mass., are among those fortunately situated in times of transportation problems. The fifty per cent increase in shipments of food and munitions, over railroads to the Atlantic seaboard for transmission to Europe makes shipment of other material in an easterly direction difficult. But traffic in the westerly direction has increased but slightly, if at all. It is therefore comparatively easy to ship out of New England. Promptness in delivery is aided by combining orders going to a given locality and making full carloads. The Framingham company is prepared to ship nursery stock by motor truck for distances of one hundred miles or more, at a cost less than the less-carload freight rate, for stock moved by motor truck does not require packing.

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We have 100,000 fine, healthy roses at lowest prices.

Write at once for list of varieties and quotations.

## West Tyler Nurseries

H. G. Strayhorn & Son, Props.

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Say you saw it in AMERICAN NURSERYMAN



# AMERICAN NURSERYMAN



## CHIEF EXPONENT OF THE AMERICAN NURSERY TRADE

Featuring the Nursery Trade and Planting News of American and foreign activities as they effect American conditions. Fostering individual and associated effort for the advancement of the Nursery and Planting Industry.

Absolutely independent.

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Drafts on New York, or postal orders, instead of checks, are requested.

ROCHESTER, N. Y., OCT. 1, 1918

Co-operation, not Competition

### A BILLION DOLLAR INDUSTRY

THE horticultural interests of the United States comprise one of the basic industries of the country. The approximate commercial value of the product derived therefrom is fully \$1,000,000,000 annually, according to the estimate of the National Congress of Horticulture, the organization of which was brought about through the persistent efforts of the "American Nurseryman." The welfare of the whole people of the United States depends largely upon the fostering and developing of these interests.

Scientific, systematic, practical, effective and adequate endeavor to promote this industry starts in the nursery of the country which represent an investment of \$25,000,000. The activities of orchardists and landscape planters are inseparably connected with those of nurserymen and are recorded in close association in this publication.

The "American Nurseryman" represents in the highest degree every worthy movement for the development of this great field and has earned its title of THE NATIONAL JOURNAL OF COMMERCIAL HORTICULTURE.

### SOME WAR-TIME FACTS

ALLOW me to express the appreciation of the Food Administration for the patriotic action of the nurserymen in using their influence to increase the amount of fruit produced during 1918. We consider the matter of sufficient importance to include it in our publicity matter going out to farm papers.—U. S. Food Administration, Public Information Division, per D. S. Burch.

Apples are a standard food product. Many persons think of apples as a tonic or relish used for dessert or as an appetizer. Apples rank in food value close to potatoes and higher than many vegetables. The best grade of ripe apples runs from 15 to 18% in food value, mainly sugar; thus in 12 cars of apples there would be something like two cars of sugar and other food constituents. If 1,500,000 bu. of apples going to waste annually in Iowa for instance, could be saved for food purposes, there would be conserved in this process some 12,000,000 lbs. of sugar and food constituents.

### IS THIS NECESSARY?

We have referred more than once to the conscientious, persistent policy of some leading nursery concerns in the matter of business ethics. It seems to us that this subject cannot too often be held up to the trade. While it has been admitted that the sound way to do business is to do it within certain clearly described lines, refusing to break over those lines for the sake of an apparent temporary advantage, it has been argued that it does not pay to operate upon so high a plane so long as so many concerns refuse to abide by such restrictions. But that it does pay has been proven over and over again, and, the concern which adheres strictly to this policy attains and maintains an enviable standing in the trade. One of the shining examples of the way this thing works out has been quoted before; but the importance of the subject, in our opinion, warrants repeated statement.

It was a case in which it was shown that John Rockefeller could not purchase nursery stock from the wholesale house of Jackson & Perkins Company. Let the company tell it:

"Last season we received, from an advertisement in one of the florists' papers, a considerable order from the Superintendent of the John Rockefeller estate at Pocantico Hills. Following our usual custom, we replied with a courteous letter, explaining that our business was confined strictly to the trade and recommended that the order be placed with a near-by nurseryman who, incidentally had been a customer of ours for many years. It worked out very satisfactorily all around. The near-by nurseryman got the Rockefeller order and we in turn got his order, not only for the stock it required, but his satisfaction and good-will over our co-operation brought us increased business from him as well.

"We are not using this illustration of our policy in any spirit of braggadocio. It is a plain business proposition with us. We think it pays us to follow that policy. We depend on the 'trade' to take our output and anything we can do to help our trade customers naturally and incidentally helps us. That is why we doubled our subscription to the Nurserymen's Fund for Market Development."

If all wholesale nursery concerns would practice this policy on all occasions, there would be fine business for all, a thorough entente cordiale, a stability of trade and the solution of price and other questions. Some reader may say: "All of which is true but it cannot be brought about." Now; now! Is that the reply to make in these times of almost superhuman undertakings all about us? Start out tomorrow on this policy which Jackson & Perkins Co. and others have found profitable as well as equitable and the thing is solved at once. When owners of automobiles were asked to conserve by refraining from the use of their cars on Sundays, there was quite general acquiescence at the outset. Some refused to conform, but the scorn and criticism which that action evoked brought even them to terms on the next occasion. To be sure, elements of patriotism and the knowledge that force would be applied if necessary entered into the case of the automobile restriction but really it was the opinion of the public which governed the matter primarily.

So, if the leading wholesale nursery concerns will resolve that on and after October 15, 1918 they will take special measures to prevent the accident of a sale of nursery stock, even in rush season, that is contrary

to what is conceded to be the best policy, and will not only discountenance such action but will take pains to direct attention in the trade to violations of this point of ethics, we shall have made a start. Why not? It is not easy, of course. These are the days of putting down evils. It is strenuous work. Old customs are radically encroached upon. But how else can it be done? And if, when a considerable number of conscientious business men are ready to do the right thing some others are not, then why should not those others be placed squarely where they belong, by plain trade announcement of who's who? We are aware that we are proposing radical action but the "creation of sentiment" plan in the hope of automatic reduction of the evil seems to have failed.

### RESTRICTED IMPORTATIONS

The Federal Horticultural Board of the U. S. Department of Agriculture late last month sent out to a limited list of nurserymen, and mainly to importers, a tentative draft of a form of quarantine to restrict importations of nursery stock.

This is the beginning of the action which it has been expected would be taken as the result of the recent hearing on the subject in Washington at which the nursery interests were represented by William Pitkin in behalf of the legislative committee of the American Association of Nurserymen, Counsel Curtis Nye Smith and one or two others.

In substance the proposed measure would prohibit the importation, after June 1, 1919, of nursery stock with the exception of fruit tree seedlings and rose stocks.

Nursery stock importations have been grouped by nurserymen, for the sake of convenience of designation, as follows:

- I. Fruit tree seedlings and rose stocks.
- II. Rhododendrons and balled nursery stock.
- III. Shrubs and small stock—raw material.
- IV. Larger tree stock, larger roses and shrubs—finished material.

Group one is of most importance to nurserymen as a whole and it will be regarded as fortunate that, pending the result of endeavor to produce in this country fruit tree seedlings and rose stocks suited in the opinion of nurserymen generally to propagating purposes throughout the United States, this class of importations will be allowed to come through.

Group four comprises a competitive class of stock in a degree, though some nurserymen have preferred to import these commodities instead of producing them. It is probable that the exclusion of this group could soon be offset by American production.

Groups two and three comprise stocks which nurserymen have depended upon much as they have the stocks in group one. It is this material which would be especially missed in case the tentative provision becomes effective. And it is, therefore, upon the class of stocks in groups two and three that efforts to provide domestic substitutes would be centered at once.



## HARDLY SCRATCHED

In some quarters complaint is made that the nursery business is slow. Well, push it then. We all have to work harder in times of unusual stress and a general tendency toward distraction.

Do you know that last spring a nursery concern sold one order in which one item came to more than \$100,000?

Do you know that a nurseryman sold one customer last season and this, over \$25,000 worth of stock?

Do you know that another firm has booked a single order, for next spring's delivery, for \$75,000 worth of stock?

Do you know that a nurseryman is now making a planting of perennials on an estate in which one item used is 15,000 phlox?

Do you know that in Rochester, N. Y., on three occasions within as many weeks the writer has been asked to suggest a landscape architect to lay out estates in or near the city?

Why, nurserymen have scarcely scratched the surface of their possible markets. Those who give value, value, value and service and who hustle with far-seeing vision do not find it "slow." The dignity and the great importance of the nursery industry, rightly conducted, is something which has been sadly overlooked. It ought to be capitalized—and advertised!

Is there anyone who agrees with us?

## The Liberty Loan Arms Our Soldiers

The subscribers to the Liberty Loans have purchased for the War Department over \$4,000,000,000 of ordnance—\$1,000,000,000 was spent for artillery; \$300,000,000 for automatic rifles; \$160,000,000 for small arms; nearly \$2,000,000,000 for artillery ammunition and \$340,000,000 for small arms ammunition; \$100,000,000 was spent for armored motor cars.

It is estimated that \$7,000,000,000 will be spent by the Ordnance Department this current year.

Every American wishes to have a part in winning the war and supporting our soldiers who are fighting our battles in France. Every subscriber to the Fourth Liberty Loan will have a part in the great achievements that the American Army is accomplishing, and in the achievements which the greater American Army will accomplish next spring.

## IN OUR LAST ISSUE

American Nurseryman, Sept. 15th

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It's billions for defense or billions for indemnity.

## AN AMERICA FRUITFUL AND BEAUTIFUL

**What Nursery Stock Has Done**—With a force of ninety men at work upon its further development, Nuevo Rancho, twenty miles from Riverside, California, in the lower end of the San Jacinto Valley, today presents a striking example of what intelligent enterprise can do in a short time in transforming unused California lands into prosperous communities, well built up and with a loyal and efficient population making good profits from the big crops yielded by its fertile soil. The rancho originally comprised about 6500 acres, of which 5000 are tillable, the remainder being in the mountain district. It is the property of the Nuevo Land Company and was turned over to the James R. H. Wagner Company of Riverside for development and sale.

In January, 1914, there was nothing on the big rancho but barley stubble. In the spring of that year 127 acres were planted to apricots, olives and walnuts; next spring 350 acres were set out, and last spring 670 acres. Today there are on the rancho about 1100 acres of orchards and this year orchardists are marketing their first apricot crop. In 1914 one pumping plant met all needs. Today there are five, and nearly 800 inches of water has been developed. The water company is organized on a mutual basis, the property owners owing it outright.

And within the three years a prosperous little town has grown up, with stores, a church, school, lumber yard and other business enterprises. Marketing of the crops is done co-operatively, efficiently and with good resultant profits to the farmers.

**Let Other Nurserymen Do Likewise**—Seizing every opportunity to help push along steps for improvement the Mitchell Nursery Co., Tacoma, Wash., has written to the South Tacoma Booster Club:

"We note from the papers the worthy intention of your club to boost South Tacoma as a place of residence, and desire to express our interest and appreciation of your proposed promotion and publicity campaign. We have been interested in the matter of making known the attractions and advantages of Tacoma for several years, both from the nature of our business and in a larger sense as citizens of Tacoma and desirous of its growth and prosperity.

"South Tacoma a few years ago was such an unattractive forlorn looking place that a visitor going through that part of the country would feel like laying his head down on a rock and having a good cry, but within the past few years a great change for the better has taken place. People have found out that they can raise a good lawn, have fruit trees and roses and other flowers in their yards, and the difference is that instead of being a dreary suburb of merely 'houses and lots' you are on the way to having a real residence section of 'homes and gardens,' attractive to residents and visitors alike.

"If we can be of service in any way we will certainly be most glad to do so, and we wish you the greatest success possible in your efforts to put South Tacoma on the map as the cleanest, most attractive and beautiful, most slightly place in the entire city."

## Apple Growers' War Board

Apple growers of the Northwest, through representatives sent to Portland at the request of the governors of Oregon, Washington and Idaho, have decided to put the apple industry on a war basis. The conference of the representatives, held a few days ago in the Portland hotel, resulted in the appointing of a war board, members of which are experts in production, distribution and military needs.

The war board will deal with the great problem of harvesting the apple crop, transporting it to markets and filling the need of apples in the army and navy. It is formed so that here will be a representative body which can be called together at any time to consider the problems and policy of the industry throughout the Northwest.

**Urges Back Yard Orchards**—Nurserymen will be called upon to supply trees as the result of literature sent out by the U. S. Dept. of Agriculture. "Everybody who puts out a war garden can be growing a small home orchard in it," says Dr. J. C. Whitten of the University of Missouri College of Agriculture. "This small home orchard can produce just as valuable a product for the average family as does the vegetable garden itself. The cultivation given the vegetables is just what is required by the young trees. Such an orchard may comprise fruits that will furnish a succession from the Early Richmond cherry which ripens in May up to the late keeping apples like Ingram and Lansingburg, which will keep until the following May. One tree of each variety is enough. If, however, a larger number of trees is desired they should be mainly the long keeping winter apples.

"The fruit trees should be given as thorough cultivation as corn or vegetables at least until they reach bearing age. Any kind of garden vegetables or strawberries and other small fruits may be grown between the trees. If a rank growing crop like corn grows higher than the trees, one row of corn should be left out, preferably north and south, in the tree row, so the fruit trees will not be shaded by it until they get well established. Low growing vegetables or berries may be planted as close to the trees as desired."

## Flowers at the War Shrine in Hyde Park

—The War Shrine in Hyde Park has been amply furnished with flowers since its dedications early in the present month. Probably not fewer than 200,000 persons have contributed floral tributes, and some business men place flowers on the Shrine each day. A proposal is on foot to erect a permanent shrine in place of the wood and canvas erection which has created such general interest.—Gardeners' Chronicle, London, England.

Chairman Henry Penn of the Florists Publicity Committee, in his annual report said:

"People's buying habits are changing fast. A few years ago it was only the well-to-do who ever came into a florist's, but now the masses are patronizing us more and more, and if we stick to our publicity persistently, we will have the masses with us solidly, and every branch of our business will experience a still more tremendous growth after the war.

"But we must get in our hard work now while the general public is prosperous, open to conviction and ready to buy more merchandise than the country is able to produce. The production of flowers and plants of course, is costing much more today, but my belief is that national advertising will create such a demand for flowers that we can adjust our prices to meet the increased cost of production, and decrease in volume, due to government restriction. Let us spend every penny we can possibly raise this fall in national advertising so as to keep up the demand for flowers, and build up a prestige for the future which is bound to benefit every member of our society."

The New York "Times" in a recent editorial clearly indicated the essential character of the nursery business—the basis of the fruit business—as follows:

"The meat and fruit trades demand the use of refrigerator cars and the replenishing of their wastes of ice. Ordinary freight rates should not apply to them, not even if the carriers and packers were exposed to the reproach of rebating. The benefit to the public in the cheapening of fruits and meat and the widening of the markets to which meat can be supplied from central abattoirs and distant climates is substantial, and ought not to be lost from niggardliness about profits when they are less than the service to the public is worth. Similar considerations apply to the cars which need heating instead of cooling, such as the early vegetable trade requires. The care of such commodities is a service apart from their carriage, and is better performed by those interested in the price and condition of the goods than by those charged merely with the duties of transport."

# Commercial Fruit Culture

## COMMERCIAL APPLES Geographical Distinction and Commercial Importance

Among the varieties of commercial apples, the Baldwin leads in production, according to a nation-wide survey recently completed by the United States Department of Agriculture. It constitutes one-half of the barreled crop of New England and New York and one-fourth of the crop of western Michigan, all regions of large apple production.

Ben Davis, Gano, and Black Ben have the widest geographic distribution. Prominent centers of Ben Davis production are in the Shenandoah-Cumberland region, including parts of Virginia, West Virginia, Maryland, and Pennsylvania; it leads in Missouri, Illinois, the Ozarks, and the Missouri River and Mississippi River apple regions; and it ranks high in production in the West, particularly in Colorado, Utah, and Washington. Gano and Black Ben are grown more extensively in the West than in the Middle West and East.

### Commercial Importance of Winesap

Winesap follows Ben Davis in commercial importance, and this is particularly great in the Yakima and Wenatchee Valleys in Washington. In the Piedmont district of Virginia, Winesap is the leading apple variety, and it has considerable commercial importance in the Arkansas and Missouri River valleys and in parts of Illinois.

The Jonathan is the leading variety in Colorado and Idaho, and is important in Washington, Oregon, Utah, and New Mexico. Its orchards are widespread at the junction of Iowa, Missouri, Nebraska, and Kansas, and are common in Illinois, the Ozarks, and the Ohio River region, and its production is increasing in some parts of the East.

York Imperial is the leading commercial apple of the Shenandoah-Cumberland region, a region that ranks next to New York in the production of barreled apples. The normal apple production of this region is 3,500,000 barrels, of which Yorks are two-fifths. The Ohio River section and Missouri also produce considerable quantities of this variety.

The Northern Spy was regarded as the third apple variety in order of commercial production until recent years, and now it is probably the seventh. The commercial crop comes mostly from Michigan, New York, and Vermont. Close to Northern Spy is Yellow Newtown, or Albemarle Pippin. Its leading district is the Pajaro Valley, Cal., where 1,000,000 boxes were produced in 1916 within a radius of 15 miles from Watsonville. Following California in order of production is Oregon, where the Yellow Newtown districts are the Hood River and Rogue River valleys. Washington is third in order and Virginia fourth.

### Other Important Varieties

Apple varieties that are certainly increasing in commercial importance in the United States are Jonathan, Stayman, Delicious, Winesap, Rome Beauty, York Imperial, Duchess, Grimes Golden, McIntosh, Wealthy, Transparent, Black Twig, Williams Early Red, Arkansas Black, and Yates. A stationary production is held by Baldwin, Rhode Island Greening, Yellow Newtown, Gravenstein, White Winter Pearmain, Northwest Greening, Gano, Wagener, Maiden Blush, Benoni, Bonum, Nero, and Starr.

For one reason and another many apple

varieties are declining in production. Among them are widely known kinds, such as Ben Davis, Northern Spy, Esopus Spitzenburg, Tompkins King, all kinds of Russet, Hubbardston, Missouri Pippin, Tolman Sweet, Smith Cider, Fameuse or Snow, Yellow Bellflower, Twenty Ounce, Rambo, Swaar, Red Canada, Wolf River, Fall Pippin, and other commercial varieties. And to this list would be added many noncommercial ones.

### Results From Orchard Fertilization

A recent bulletin from a Pennsylvania station summarizes results of nine-year orchard experiments. The fertilizers have shown in general that nitrogen is likely to be of most importance in orchards for improving both yield and growth. Thus far the nitrogen from commercial sources or from stable manure has proved more effective than that from cover crops. When slow-acting carriers of nitrogen are used no immediate effects should be expected before the following year. As indicated by experiments conducted elsewhere, applications of nitrate of soda about the time the buds are starting into growth in the spring or slightly later may materially influence the crop of the current season.

Neither phosphorus nor lime when used alone has exerted any important influence on either the yield or growth of apples in these experiments. The addition of phosphorus to nitrogen, however, has generally proved very beneficial. The gains from this combination in certain cases have exceeded 200 bu. per acre annually for the last nine years. It is pointed out that lime may be indirectly beneficial at times through its favorable influence on the growth of leguminous cover crops.

The rate of application now recommended for an acre of bearing trees consists of 150 to 200 lbs. of nitrate of soda and 250 to 300 lbs. of acid phosphate or their equivalents. For younger trees which are less likely to respond to fertilizers a good mulch of stable manure at the rate of 8 tons per acre is recommended. Potash has proved of material benefit in only one experiment. Fifty lbs. of the high grade muriate or its equivalent is now considered ample for an acre of bearing trees.

No fertilizer has materially improved the color of the fruit and those containing nitrogen have generally reduced it. This is probably due to delayed maturity, which has an advantage in the case of the more northern varieties, such as Baldwin, Hubbardston, and McIntosh, when grown in Pennsylvania. Lack of color in these varieties is readily

overcome by delaying the picking. With varieties requiring a long growing season, such as York Imperial, it may be necessary to utilize other aids to color, such as open pruning and sod culture, in order to overcome the detrimental effects of nitrogen. In certain orchards no kind of fertilization has yet proved beneficial.

The results secured from tests of cultural methods and cover crops in apple orchards during the last nine years indicate that in the absence of fertilization the mulch method generally gives the largest growth and the most fruit in young orchards, while the tillage and cover crop method has done slightly better in mature orchards. The greater efficiency of the mulch on the young trees is apparently connected with its greater moisture-conserving effects. In many cases the mulch can be readily grown between the tree rows in young orchards by the use of alfalfa and possibly also by the use of other plants. By this method many of the sloping foothill lands of the state, which are not well adapted for tillage may be satisfactorily utilized in the production of fruit.

In the presence of proper fertilization there has been comparatively little difference in efficiency in tillage and cover crops, and proper sod mulch in their effects on the yield and growth of apples. Even the sod treatment when accompanied by fertilization of the right kind has been very satisfactory in many cases.

**Apple Growers Ask Soil Survey**—Immediate steps to secure a deep soil survey of the Arkansas River valley, showing definitely the land suited in both soil and subsoil to the growing of apples and other fruit will be taken by the Arkansas Valley Apple Growers' association. Acting through President H. J. Waters of the Kansas State Agricultural College, they will make a request for such a survey to the Bureau of Soils of the United States, fully convinced that they can make their claim seem vital enough to secure what they ask.

"Take the land of the Arkansas valley which is adapted to apple growing, move it 1,000 miles from here and the people right here would go and pay \$500 or \$1,000 per acre for it to plant orchards on," said Joe Moncrief of Winfield, Kan. "Here, however, this land has for years been the best wheat and corn land of the valley and has been making its owners a good profit. It is hard to get them to take a few years off to raise an orchard that would pay them probably ten times as big returns, once it is bearing."

Such a survey as is contemplated would have to be made on soundings of from eight to ten feet. Not only the top soil, but the subsoil must be right to produce apples. The subsoil must be what is known to apple growers as "orchard clay," containing about 40 per cent of sand.

Carl H. Young, of Oxford, estimates that there are 5,000 acres of high class orchard land in Cowley county which is not now in orchards. This would be about ten times the present acreage in orchards, he estimates.

## THE LIBERTY LOAN CLOTHES AND FEEDS OUR SOLDIERS

Since the beginning of the war, we have spent for Army use \$37,000,000 for flour; \$14,000,000 for sugar; \$43,000,000 for bacon; \$12,000,000 for beans; \$9,000,000 for canned tomatoes, and \$3,000,000 for rice. These are only some of the large items in our Army's bill of fare. We have spent \$126,000,000 for shoes; over \$500,000,000 for clothing winter and summer; nearly \$150,000,000 for blankets.

Our axes for the Army have cost over \$6,000,000; our rolling kitchens \$47,000,000 and field ranges \$1,500,000. The Army is using 2,500,000 shovels costing \$1 a piece. Our motor trucks to carry supplies and am-

munition cost \$240,000,00, and for horse-\$37,000,000. Our 279,000 horses and 132,000 mules have cost us nearly \$100,000,000; to feed them has cost over \$60,000,000 and the harness for them nearly \$30,000,000.

These figures are large, but we have nearly 2,000,000 men in France and nearly as many in cantonments here, and the United States and the people of the United States, through the Liberty Loan are making these soldiers as safe and as comfortable, as powerful and effective as possible.

Every subscriber to the Liberty Loan has helped, and every subscriber to the Fourth Liberty Loan will help to win the war.



### An Error Righted

Regarding a complaint by a planter that peach trees he bought of a regular nursery firm bore worthless fruit and that after four years he pulled up the trees and asked for damages, N. S. Platt of Connecticut says in Rural New Yorker:

I know nothing of this case except as it appears from reading his complaint, but, judging from that alone, I should say that he was too hasty. He may not know that the first fruits of a tree are often inferior, even though the tree be genuine. I raised and sold trees for 25 years, and have fruited trees for 50 years. I sometimes returned money paid me for trees where mistakes were made, but I would not in his case have been willing to return it merely on his say-so, without some further evidence. I have seen so many cases where the first fruits were disappointing.

I once knew a case where a quantity of Gravenstein apple trees were purchased from a New York nursery and planted in Massachusetts on poor, thin soil. The first crops were small and very inferior. The owner complained. The nurseryman was amenable and desirous of correcting a wrong if one had been made. Experienced fruit men were sent to look into the case, who decided that the trees were not genuine, and that damages were due. The nurseryman settled up satisfactorily and the case was considered closed. But four or five years after, under better cultural conditions, those same trees produced real Gravenstein apples and all parties desiring only what was right, the same formality of judging was gone through and I think by the same men, and the former judgment reversed, the nurseryman cleared and everything all right.

Bonds speak louder than words.

If you can't fight, your money can.

Freemen buy bonds; slaves wear them.

Say you saw it in AMERICAN NURSERYMAN

## Small Fruits

**Flavor.**—One of the most difficult characters to determine is that of flavor. There is often more or less lack of uniformity in flavor between berries of the same variety, berries ripening in a dry or wet period, the particular stage of ripeness reached and also a variation in personal likes and dislikes. What is pleasant to one palate may be quite disagreeable to another. There is, however, such a wide variation in flavors among the different varieties that some kind may be found acceptable to almost any palate. Over forty of the varieties may be designated as subacid or slightly sprightly while at the extremes are found seven varieties, Collins, Friendship, Greek, Lady Cornelle, Minnesota No. 1017, Rewastico and Wide-awake distinctly tart and varieties as Alaska, Argyle, Chester, Ford, Knight No. 1, Myrtle and Wittlinger No. 1 among the list of those sweetest. Argyle, Gibson and Magic Gem are among the highest-flavored kinds.

**Quality.**—The most important rating is that of quality. By quality is meant the sum of all the characters that make the berries desirable to the taste. What varieties may be considered best or poorest in quality? Here again the personal element enters, for standards of judgment differ and what is good in the sight of one person may be moved forward or backward by some other judge. Three varieties, Argyle, Magic Gem and Morgan No. 21 were rated very good, over thirty varieties good, eighteen kinds fair and eight varieties distinctly poor.

Promising varieties.—In the determination

of what varieties should be recommended for testing, all factors must be considered and each should receive its relative value. It must be remembered that all the varieties fruited on a heavy, cold, clay loam which is not considered ideal soil for the strawberry. Doubtless on lighter, warmer soil some of these varieties would have made a better record. All the most promising kinds have their defects as well as their good points. The following list is therefore only suggestive of those varieties which have made the best showing for one or more years under the local climate and soil-conditions at this station. More than half the varieties are in the discard list. The eight seedlings originating at this station are of course included among those of promise, leaving nine other kinds considered of merit, with eight varieties on the doubtful list, which on account of an unusually fine record along one or more important characters should be further tested despite certain defects.

#### DESIRABLE VARIETIES

Addison, Alden, Angola, Arcade Argyle, Ashton, Athens, Aurora, Campbell, Eldorado, (?) Eureka, Ford, (?) Frances Willard, Gibson, (?) Hustler, (?) John H. Cook, Joe (Joe Johnson), (?) Kellogg Prize, Magic Gem, Morgan No. 21, (?) Minnesota No. 3, Oregon, Pearl, (?) Warren, (?) Wide-awake.

At least one nursery concern has adopted the slogan we suggested in a recent issue: "An America Fruitful and Beautiful." It heads the cover page of the Elm City Nursery company's new autumn list, New Haven, Conn.

Mr. Hoover, the U. S. Food Administrator, is quoted as saying that fruit is even more essential than potatoes as an article of diet.

Say you saw it in AMERICAN NURSERYMAN

## HILL'S EVERGREENS

We are headquarters for everything in the Evergreen line, and with few exceptions have our usual full supply, but some things are scarce and getting scarcer every day. Owing to the lack of imports, demand is brisk, and shrewd Nurserymen are covering their requirements early.

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**Dealers**—Let us take care of your wants in Windbreak, Hedge and Ornamental Evergreens. Send in your list for pricing now, while assortment is complete.

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We sell to THE TRADE only, and make a specialty of  
**OREGON CHAMPION GOOSEBERRY  
PERFECTION CURRANT**

and  
**CLEAN COAST GROWN SEEDLINGS**

We also have growing for fall delivery a large assortment of general nursery stock, including Fruit, Shade and Ornamental trees, Roses, Etc.

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Correspondence invited

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## Trade Bulletins

**Australian Fruit Growers Here.**—Representatives of the Australian fruit industry, J. M. Ward, chief of the fruit division, Department of Agriculture in Tasmania, the island possession, and S. J. Kellaway, director-general of the Tasmanian Orchardist and Producers' Co-operative Association, Ltd., are in California on a six-months' tour of inspection of the West Coast, studying fruit culture and methods of co-operation of the producer and trade. Many valuable points have been gained by the Australians, according to their own statements, and they have given some very helpful pointers to the rich San Joaquin Valley, the nucleus of the great California fruit industry.

**Missouri Grape Harvest.**—In his notes on the grape harvest just closed in his section, L. E. Johnson, Cape Girardeau Co., Missouri, says in Rural New Yorker: Norton's is too small; Goethe splendid for family use; Catawba does not ripen evenly, and Fern and Muench have proved the best for very late. Muench ripens more evenly, but Fern is larger and of better quality. Ripening so late, after all the main crop is gone, they command good prices. There is not much that is new to say about the crop. The drought brought it on a week sooner than usual. Eclipse failed to bear this year, and the scanty fruit was no earlier than Moore's Early Daisy is vigorous and productive, but is outclassed by Moore's and Campbell's. Campbell's was better than ever before in perfection of bunch; pollination was nearly perfect, and this was due to the season, for there was no change in the relative position of the vines as respects other varieties. Just why this season was better than any preceding one in 10 years I cannot guess. The same thing holds true of the pistillate Xinta. Proximity to other kinds seems to have no influence whatever. For the first time since I began growing the grape for market the price advanced, going over three cents a pound. It started in at four, and half way through it went to five, and now, on the last, it goes to six. Fancy black grapes for the Italian fruit stores held at six cents all through. They sell at 10, or three pounds for a quarter. They bought Moore's, Campbell's, Worden, select Concord, Wilder, Xinta, Fern and Muench, but Muench could not have competed with the others in their own season because it lacked the size, and this is also true in some less degree of the Fern.

**White Pine Blister Rust Under Control.**—In 68 of the 71 localities where outbreaks of the white-pine blister rust have been located during the past six years the disease has been completely eradicated through the efforts of the United States Department of Agriculture co-operating with state authorities. In the three remaining localities eradication is going on. So far this season the disease has appeared in only one of the localities where it has been previously eradicated. The blister rust has not been found in states south of Pennsylvania and the Ohio River or west of the Mississippi River, except Minnesota, Iowa, and South Dakota. Hundreds of shipments of both pine and cypresses from infected regions have been made in these states, however, and it is possible that outbreaks may occur. Federal authorities are making a diligent search to locate any such infections and are prepared to stamp the disease out as soon as it appears.

**The Soy Bean.**—The soy bean, also called the soya bean, the soja bean, and in North Carolina the stock pea, is an annual leguminous plant, a native of southeastern Asia. It has been cultivated in China, India, and Japan for more than 5,000 years and in extent of uses and value is the most important

legume now grown in these countries. Within the past few years the soy bean has become a crop of special importance in the world's commerce, and large shipments of beans, oil, and meal have been made from Manchuria to America and European countries. The soy bean, which is very rich in protein, is largely utilized by Asiatic people for food, a great variety of products being prepared from it. As the bean contains a valuable vegetable oil, it is also extensively employed in the production of oil and cake.

The value of a crop of soy beans for soil improvement depends upon the amount of available plant food which it adds to the soil and the effect which the roots have upon the mechanical condition of the soil. Leguminous plants, through the aid of the root-tubercle organisms, are able to add to the available nitrogen of the soil and therefore are extensively used in restoring soils that are deficient in that element. The fertilizing value of a crop of soy beans compares favorably with that of other legumes commonly grown for green manure.

**Gypsy Moth Laboratory.**—About 125 members of the Massachusetts Tree Wardens and Forestry Association and interested visitors from New York, Rhode Island, Connecticut, Vermont, Maine, and Canada recently inspected the experimental work in controlling the gypsy moth and the brown-tail moth, which is being carried on at the Gypsy Moth Laboratory, at Melrose Highlands, by the Bureau of Entomology, United States Department of Agriculture. The visitors saw the methods of rearing and handling the different parasites of the two insects which are being introduced from Europe and Japan. Explanations and demonstrations were given in connection with other important work, such as the use of improved material for banding trees, and the results of studies which had been made on the feeding habits of the caterpillars, and preference for different kinds of tree growth. A spraying demonstration was given with the large motor-truck sprayers used by the Bureau of Entomology for spraying infested areas to prevent the spread of the gypsy moth. It is possible, with the sprayer used in the demonstration to send a solid stream of spraying material through 4,000 feet of 1 1/8 inch hose at an elevation of 800 feet, throwing the poison 100 feet from the ground and thus reaching the tallest trees on the highest hill-tops that occur in the infested area.

**"The Motor Truck as an Aid to Business Profits,"** by S. V. Norton, is the title of a book recently published by the A. W. Shaw Company of Chicago. Mr. Norton has been very closely associated with the motor-truck industry for many years. As manager of the Truck Tire Sales Department of the B. F. Goodrich Company he has had many opportunities to study the various problems that motor-truck owners have to contend with. Every concern that is not already equipped with motor trucks for delivery; every fruit grower and nurseryman who is doing his hauling by the old-style method should read this book; and we would also advise many of those who are already using a truck to read it. There is no type of truck that is not covered in this book.

November 11-16 is to be Horticultural Week at Riverside, Cal., when the annual conventions of the California Fruit Growers and the California Association of Nurserymen will be held.

**The Carob Tree in California.**—Ernest Branton says in California Cultivator: "The dual purpose plant, whether tree, bush, or vine, has always held a peculiar fascination for me. Why plant for a single purpose when we may plant for two and get the fullest value in each line. The avocado will serve as an illustration. The tree is fully as beautiful as a magnolia or ficus (rubber tree) and as fruitful as an orange or an apricot.

"But I wish to sing the praises of another and lesser known one that has not yet been 'boomed,' but which will one no distant day be universally grown throughout a large portion of California. It is the carob or St. John's bread, Ceratonia siliqua. I was in a seed store in Los Angeles a few days ago when a prominent horticulturist entered and said: 'I want a dozen budded carob trees;

## Labor Problem

A plan has been agreed upon by the War Labor Policies Board, Provost Marshal General, Secretary of War, Secretary of Agriculture, and Secretary of Labor to put into deferred classification such persons in the new draft as are necessary in agriculture, industry, and other occupations.

Three advisers are to be associated with each district draft board to present facts relative to the supply of necessary workers in these three occupational groups. The agricultural advisers will be nominated by the Secretary of Agriculture. They will gather accurate facts regarding the requirements of agriculture for the various classes of workers in their own districts. They should have facts also as to the requirements for such classes in other districts in order that workers not sufficiently necessary in one district to entitle them to deferred classification may have opportunity to go to other districts in which they are needed.

The Department of Agriculture has sent a questionnaire to each county agent, asking him to furnish reliable information at once relative to the farm labor needs in his county. The questionnaire is to be duplicated, one copy going to the state farm-help specialist and one returned to the department. The Department of Agriculture will undertake, both directly and through the state farm-help specialist to keep each district adviser informed as to the needs of necessary farm workers in various parts of the country.

The purpose of the information called for is to assist the district draft boards in keeping in agriculture the (a) "necessary skilled farm laborer in necessary agricultural enterprise" (Deferred Class II); (b) "necessary assistant, associate, or hired manager of necessary agricultural enterprise" (Deferred Class III); (c) "necessary sole managing, controlling, or directing head of necessary agricultural enterprise" (Deferred Class IV).

The subject is of special interest to the nursery trade which is generally classed as agricultural in a broad sense and the workers in which are necessarily in large degree of the skilled class.

If you cannot get them for me now, bud some or get someone to bud them for you. That is but a small ample of orders that will be numerous in years to come.

"The best seedling trees now grown in California are not good enough, though we have some that are well worth budding from until we shall have secured better ones. Locally grown pods are not lacking in food value, analyzing in sugar content to compare favorably with any food elsewhere. We should secure from abroad trees, or buds from trees, that produce heavier crops of larger pods. No tree that I have seen grows a crop that will favorably compare with those of other lands. The best pods from the best local croppers bear pods five or six inches long, but trees are cultivated in some countries that bear an equal or greater number of pods twice as long and others bear many times the number of pods as large as the largest we grow."

After a thorough practical test extending over a period of two years a practical fruit grower declares that the tractor is indispensable for orchard cultivation. "There is no question as to the successful operation of the orchard type of tractor," he says in Field and Farm. Furthermore, it is an easy matter to distinguish the difference between land cultivated with horses and that on which tractors are used because of the greater depth of cultivation possible.

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Philadelphus Aurea, " " "	30.00 per M
Spirea Anthony Waterer " " "	25.00 per M

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If it relates to Commercial Horticulture it is in "American Nurseryman."

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## IT SURELY OUGHT

IT surely ought to be apparent to almost anybody that the information in a business paper, whether it be in the editorial or in the advertising columns, may easily be of the most tremendous value to the readers of that journal.

As a matter of fact, only those who have been "on the inside" can know the tremendous influence which an efficient business paper wields nowadays in shaping the course of events within its own industry. Very much of the work done by such a journal never appears within its pages at all, but is rendered as supplementary advice and assistance in personal instances.

Even when this is not the case, and the results of investigation carried on or reports of data gathered are published in the pages of the periodical, the reader gets facts which are vital to the well-being of his industry, and gets them at the purely nominal expense of his subscription, though if collected for his individual use alone, or under his own direction, the gathering of such material might have cost hundreds of dollars. The relation between subscriber and publication is in fact getting so close and direct, in the business paper field as well as in others, that there is a well-defined tendency for the trade publication to become a sort of business forum, or public meeting place where all interested persons may make their contributions to the good of the cause in general.—Printers' Ink.

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Plant Propagation Greenhouse  
and Nursery Practice

M. G. KAINS

So many discoveries of new facts by plant investigators, shortcuts and "wrinkles" worked out by plant propagators, and nursery, greenhouse and garden methods simplified or made more effective, have made books hitherto available on plant propagation out of date.

There has also been an insistent call for a volume that would not only include the character of information wanted by nurserymen and other plant propagators, but also discuss the subject of plant propagation from the standpoint of fundamental principles, and include the latest conclusions advanced by investigators throughout the world.

This new book by Professor Kains will appeal with equal force to the amateur, the professional propagator, and the teacher in agricultural colleges and schools.

The book devotes many pages to special plant lists and condensed directions for propagation of vegetables, fruits, annual and perennial flowers, bulbs, ferns, orchids, cacti, evergreens, deciduous trees and shrubs, vines, water plants, greenhouse and house plants and palms.

The table of contents includes: An introduction on general principles, germination, seed testing, potting, layerage, bottom heat, cuttage, classes of cuttings, graftage, and theories and laws, Daniel's experiments in graftage, tree stocks and scion handling, grafting waxes and wound dressing, methods of grafting considered individually, budding methods, nursery management, and laws affecting nursery stock.

Illustrated 5 1/2 x 7 1/2 inches. 342 pages. Cloth. Price \$1.65

AMERICAN FRUITS PUBLISHING CO.  
39 State Street - Rochester, N. Y.

## LITERATURE

A very serviceable and at the same time attractive wholesale price list of nursery stock is that just issued by the Jackson & Perkins Co., Newark, Wayne Co., New York. In the first place, it is a valuable booklet of reference for the "Preferred Stock" for which this company is noted. In the next place it is distinctly readable by reason of the excellent style of composition and make-up. Illustrations are used effectively, not profusely, and with a tint of ink and paper which enhances the presentation. Ornamental stock predominates, but there is a fruit stock department listing standard varieties. A specialty is made of forcing stock for florists, and the company is American agent for French stocks for nursery planting. An interesting practical feature of this company's operations is the wintering of a large herd of cattle for the sake of the manure, an essential factor of fertility. For a large local canning factory the company grows a considerable quantity of peas. It seeds alfalfa with the peas, putting humus in the soil and supplying hay which with corn ensilage feeds the cattle. The company will add 250 head of cattle this winter. Prices for nursery stock in this list are based upon present market conditions and are subject to change without notice. Correspondents are requested to use their printed business stationery. The company sells to the wholesale trade only; it has no retail trade.

A service of large import to American horticulture has been contributed by Prof. U. P. Hedrick of the New York Agricultural Experiment Station, Geneva, N. Y., in the production of a series of comprehensive descriptive records of important fruits of New York. Volumes on apples, grapes, plums and cherries have appeared in this series in recent years; and now a volume on peaches has been added. The title implies treatment for the confines of a state, but all varieties of the peach grown in North America, as well as many known only in other continents, have been considered, under the supposition that all might be grown in New York State and are therefore of interest to the peach growers of the State. The comprehensive character of the work is

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shown by the fact that it gives the history and uses of the peach, botanical characters, statistics, synonymy, bibliography, economic status and full descriptions of varieties. Color plates occupy prominent places in the volume. Space does not permit detailed reference to the vast fund of information in this work of 541 pages 9x11½. There are 95 full page illustrations, nearly all in color.

**A New Pomological Work**—The Pomological Society of France has decided to publish, in monthly installments, the valuable descriptive work of M. De La Bastie, on pears and apples as a supplement to the Society's Journal. M. De La Bastie was for many years president of the Pomological Society, and his collection of fruits at Balvey was well known to all who followed French Pomology.

**Recent Publications**—Retail autumn catalogue of Storrs & Harrison Co., Painesville, O.; Bulbs and Plants For Fall Planting, Holm & Olson, St. Paul, Minn.; Ornamental Stocks, Barbier Co., Orleans, France; Apple Bud Selection, University of Illinois Expt. Sta. bulletin by Charles S. Crandall.

Col. George W. Poague, well-known nurseryman of Graysville, Tenn., and president of the Tennessee Nurserymen's Association, is a candidate for representative in the Tennessee Legislature from the counties of Rhea and Meigs. Among other praiseworthy planks in his platform is this:

We have an excellent climate, soil and market facilities for horticultural enterprises unsurpassed by any state in the union. Horticulture should receive state aid as well as agriculture. The state should establish a demonstration farm or farms to encourage this great industry and bring in capital to help to make this, as it can and should be, the greatest fruit producing state in the Union. This will greatly increase the food supply of the nation. The war and the after effects of the same will necessitate, for years to come, a large increase in all food products. This is Tennessee's opportunity to increase the value of its lands and lower its tax levy, as Virginia has done by

His home papers strongly support his candidacy.

## Foreign Notes

Echoes of President Mayhew's address at the Chicago convention of the A. A. N. come from Australia where his suggestions as presented to the Association have been thus summarized:

"(1) Prices of nursery products, wholesale and retail, must advance to save the business from bankruptcy. It was costing over 100 per cent. more to produce trees in 1918 than it did in 1914.

"(2) Future policies must be shaped to meet changing conditions; the world today is in the re-making. The nursery business must be placed upon a more stable basis, a system of research must be inaugurated, and more adequate machinery provided for effective organization.

"(3) The nursery business must render a higher order of service. A ban should be placed on all "shyster" practices in growing, grading, selling, advertising, etc. Every false statement, every non-established plant, every false brand is an assassin's knife to the trade.

"(4) Market Development.—A comprehensive practical plan for publicity must be developed. They were definitely reckoning on \$50,000 (£10,000) per annum for five years for this publicity work."

Let our object be our country, our whole country, and nothing but our country, and, by the blessing of God, may that country itself become a vast and splendid monument, not of oppression and terror, but of wisdom, of peace, and of liberty, upon which the world may gaze with admiration forever.—Daniel Webster.

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FIRST, only to include those practices of propagation which are in general use and which are accepted by the orchardist and the commercial nurseryman as being the most important.

SECOND, to furnish, in a condensed form, such information on propagation as will enable the general fruit-grower to follow out the practices. It is assumed that the average fruit-grower has a general knowledge of the various methods of propagation, hence the many confusing details are here omitted.

THIRD, an attempt is made to follow rather closely the methods employed by the larger commercial nurseries and to contrast these with the similar operations of the orchardists. The fruit-grower who buys his nursery stock desires to know something of the methods whereby it is produced. The student of Horticulture needs a general knowledge of nursery work and how to apply it to either commercial or home use.

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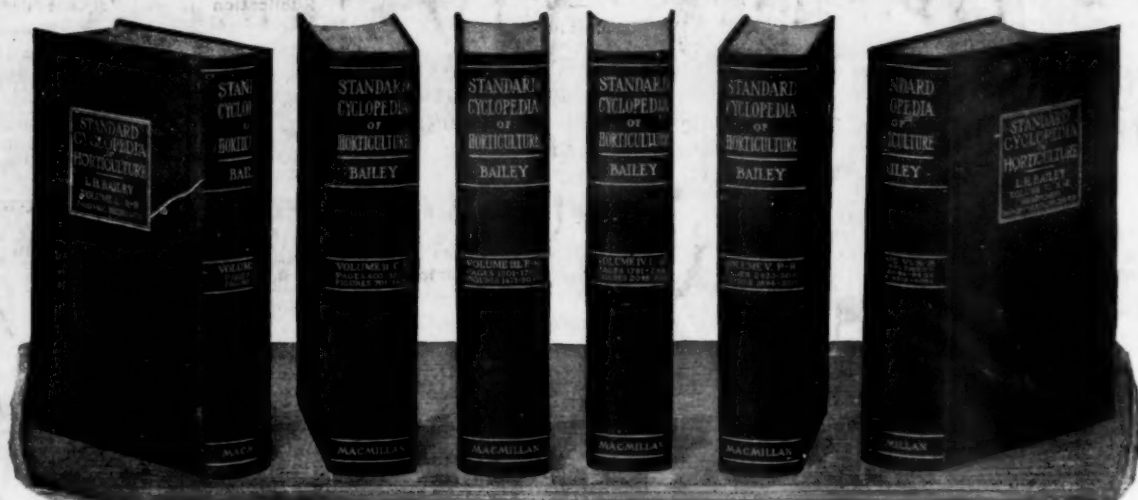
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